

## **LISTING OF THE CLAIMS:**

Claim 1 (Currently Amended) A method for detecting a toxicant of interaction between two or more binding partners in an aquatic, terrestrial, gaseous or industrial environmental sample, wherein at least one of said binding partners is immobilized to a substrate comprising glass, polystyrene, polymethacrylate, cellulose, nylon, polyvinylchloride or polypropylene, said method comprising contacting the binding partners before, during or after said partners have formed a binding partnership with a said sample putatively containing said toxicant; and screening for either dissociation of binding between said binding partners or inhibition of binding between said binding partners wherein dissociation or inhibition of binding is indicative of the presence of said toxicant.

Claim 2 (Cancelled)

Claim 3 (Previously Presented) A method according to Claim 1 wherein the toxicant is a heavy metal, a heavy metal ion, an organic compound or an organo-halide.

Claim 4 (Currently Amended) A method according to Claim 1 wherein a binding partner is comprises a protein[[,]] or a nucleic acid molecule ~~or a combination thereof~~.

Claim 5 (Original) A method according to Claim 1 wherein the binding partner is an enzyme.

Claim 6 (Original) A method according to Claim 1 wherein the binding partner is a substrate of an enzyme.

Claim 7 (Original) A method according to Claim 1 wherein a binding partner comprises a sulfhydryl group.

Claim 8 (Original) A method according to Claim 4 wherein the binding partners are actin and actin-binding proteins.

Claim 9 (Original) A method according to Claim 8 wherein the actin-binding protein is DNaseI or cofilin.

Claim 10 (Cancelled)

Claim 11 (Previously Presented) A method according to Claim 1 wherein the solid support is polystyrene or polymethacrylate.

Claim 12 (Previously Presented) A method according to Claim 8 wherein the actin or actin-binding protein is labeled with a dye.

Claim 13 (Withdrawn) An assay device for detecting an inhibitor of interaction between members of binding partnership comprising two or more binding partners said assay comprising a solid support comprising a binding partner immobilized thereto and a binding partner labeled with a reporter molecule to said immobilized binding partner.

Claim 14 (Withdrawn) An assay device for detecting an inhibitor of interaction between members of binding partnership comprising two or more binding partners said assay comprising a solid support comprising a binding partner immobilized thereto and a container adapted to contain a binding partner of said immobilized binding partner which is labeled or capable of being labeled with a reporter molecule.

Claim 15 (Withdrawn) A method according to Claim 13 or 14 wherein the inhibitor is a toxicant.

Claim 16 (Withdrawn) A method according to Claim 15 wherein the toxicant is a metal, metal ion, organic compound, organo-halide or a complex containing two or more of the foregoing.

Claim 17 (Withdrawn) A method according to Claim 13 or 14 wherein a binding partner is a protein and/or a nucleic acid molecule.

Claim 18 (Withdrawn) A method according to Claim 13 or 14 wherein the binding partner is an enzyme.

Claim 19 (Withdrawn) A method according to Claim 13 or 14 wherein the binding partner is a substrate of an enzyme.

Claim 20 (Withdrawn) A method according to Claim 13 or 14 wherein a binding partner comprises a sulfhydryl group.

Claim 21 (Withdrawn) A method according to Claim 17 wherein the binding partners are actin and actin-binding proteins.

Claim 22 (Withdrawn) A method according to Claim 21 wherein the actin-binding protein is DnaseI or cofilin.

Claim 23 (Withdrawn) A method according to any one of Claims 13 to 22 wherein at least one of the binding partners is immobilized to a solid support.

Claim 24 (Withdrawn) A method according to Claim 23 wherein the solid support is polystyrene or polymethacrylate.

Claim 25 (Withdrawn) A method according to Claim 21 or 22 wherein the actin or actin-binding protein is labeled with a dye.

Claim 26 (Withdrawn) Use of binding partners of a binding partnership in the manufacture of an assay for the detection of an inhibitor of interaction between said binding partners.

Claim 27 (Previously Added) The method according to Claim 9 wherein the actin or actin-binding protein is labeled with a dye.

Claim 28 (Withdrawn) The method according to Claim 14 wherein the inhibitor is a toxicant.

Claim 29 (Withdrawn) The method according to Claim 14 wherein said binding partner is a protein or a nucleic acid molecule.

Claim 30 (Withdrawn) The method according to Claim 14 wherein the binding partner is an enzyme.

Claim 31 (Withdrawn) The method according to Claim 14 wherein the binding partner is a substrate of an enzyme.

Claim 32 (Withdrawn) The method according to Claim 14 wherein at least one binding partner comprises a sulfhydryl group.

Claim 33 (Withdrawn) The method according to Claim 22 wherein the actin or actin-binding protein is labeled with a dye.